



Who is experiencing differential impact from HIV/AIDS?

December 2004

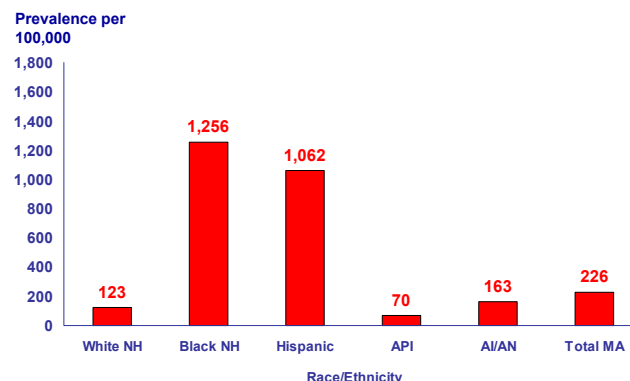
Overview

As we have historically seen, HIV/AIDS does not affect all Massachusetts populations equally. One way to reveal which racial/ethnic groups are experiencing differential impact from HIV/AIDS is to compare rates of HIV/AIDS prevalence (people living with HIV/AIDS) and HIV diagnosis per 100,000 population among different groups. Since the distributions of age in various population groups differ, these rates are age-adjusted to make comparison across groups more valid. (Please see the detailed data tables and technical notes for a full description of age-adjustment and sample calculations.)

In Massachusetts, the age-adjusted prevalence rate of HIV/AIDS varies substantially across race/ethnicity. The age-adjusted prevalence rate among black individuals (1,256 per 100,000) is 10 times greater, and among Hispanic individuals (1,062 per 100,000) is 9 times greater than for white individuals (123 per 100,000). Similarly, black and Hispanic individuals have been diagnosed with HIV infection in recent years at higher rates than white individuals. The age-adjusted average annual rate of HIV diagnosis from 2001 to 2003 among black individuals (90 per 100,000) is 13 times greater, and among Hispanic individuals (56 per 100,000) is 8 times greater than for white individuals (7 per 100,000). The following analyses describe age-adjusted rates of HIV/AIDS prevalence and recent HIV diagnosis per 100,000 population in Massachusetts in greater detail.

Age-Adjusted Rate of HIV/AIDS Prevalence (People Living with HIV/AIDS) by Race/Ethnicity

Figure 1 Age-Adjusted HIV/AIDS Prevalence Rate per 100,000¹ Population by Race/Ethnicity: MA, Data as of 7/1/04

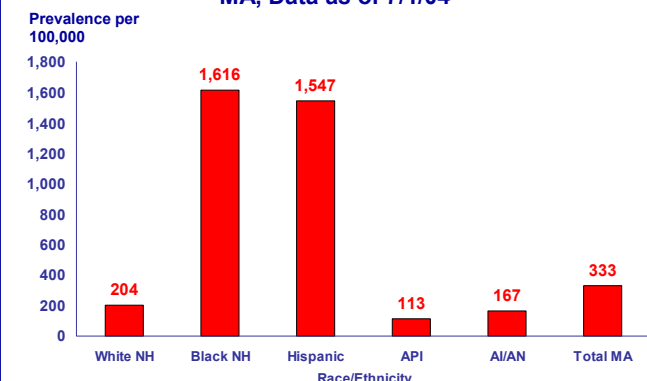


¹ Population sizes for rate calculations are based on year 2000 population estimates from the MDPH Center for Health Information, Statistics, Research and Evaluation; NH= Non-Hispanic, API = Asian/Pacific Islander; AI/AN = American Indian/Alaska Native; Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 7/1/04

- As of July 1, 2004, for every 100,000 people in Massachusetts, 226 were living with HIV/AIDS (rate adjusted for age of the population groups).
- The age-adjusted prevalence rate of HIV/AIDS among black individuals (1,256 per 100,000) is 10 times greater, and among Hispanic individuals (1,062 per 100,000) is 9 times greater than for white individuals (123 per 100,000).
- When considering the differential impact of HIV/AIDS prevalence by race/ethnicity, please note that, within the broad category of race/ethnicity, there are differences by place of birth. For example, 37% of black individuals living with HIV/AIDS are non-US born as compared to 5% of white individuals. Non-US born black individuals living with HIV/AIDS come primarily from Sub-Saharan Africa and the Caribbean Basin, whereas non-US born white individuals come primarily from North America and Europe.

Age-Adjusted Rate of HIV/AIDS Prevalence (People Living with HIV/AIDS) by Race/Ethnicity for *Males*

Figure 2 Age-Adjusted HIV/AIDS Prevalence Rate Among Males per 100,000¹ Population by Race/Ethnicity: MA, Data as of 7/1/04

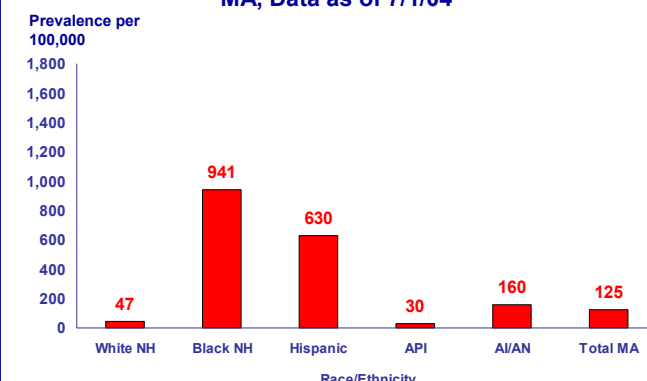


¹ Population sizes for rate calculations are based on year 2000 population estimates from the MDPH Center for Health Information, Statistics, Research and Evaluation; NH= Non-Hispanic, API = Asian/Pacific Islander; AI/AN = American Indian/Alaska Native; Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 7/1/04

- As of July 1, 2004, for every 100,000 **males** in Massachusetts, 333 were living with HIV/AIDS (rate adjusted for age of population groups).
- The age-adjusted prevalence rate of HIV/AIDS among both black **males** (1,616 per 100,000) and Hispanic **males** (1,547 per 100,000) is 8 times greater than for white **males** (204 per 100,000).

Age-Adjusted Rate of HIV/AIDS Prevalence (People Living with HIV/AIDS) by Race/Ethnicity for *Females*

Figure 3 Age-Adjusted HIV/AIDS Prevalence Rate Among Females per 100,000¹ Population by Race/Ethnicity: MA, Data as of 7/1/04



¹ Population sizes for rate calculations are based on year 2000 population estimates from the MDPH Center for Health Information, Statistics, Research and Evaluation; NH= Non-Hispanic, API = Asian/Pacific Islander; AI/AN = American Indian/Alaska Native; Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 7/1/04

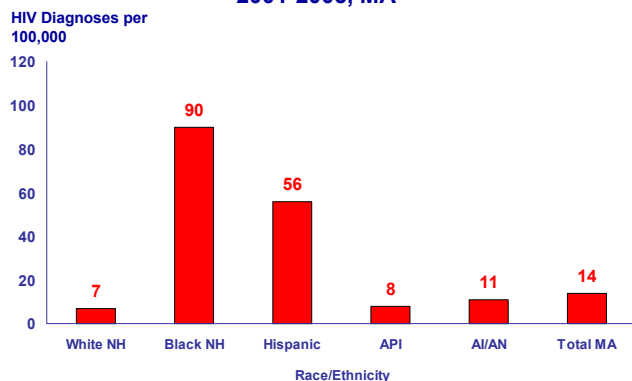
- As of July 1, 2004, for every 100,000 **females** in Massachusetts, 125 were living with HIV/AIDS (rate adjusted for age of population groups).
- The age-adjusted prevalence rate of HIV/AIDS among black **females** (941 per 100,000) is 20 times greater, and among Hispanic **females** (630 per 100,000) is 13 times greater than for white **females** (47 per 100,000).

Rate of HIV/AIDS Prevalence (People Living with HIV/AIDS) by Race/Ethnicity and Health Service Region (HSR) in Massachusetts

- The Boston HSR has the highest age-adjusted prevalence rate of HIV/AIDS among regions at 702 per 100,000.
- In each region, the age-adjusted prevalence rate of HIV/AIDS among black individuals and Hispanic individuals is higher than among white individuals.
- Among regions, the highest age-adjusted prevalence rate of HIV/AIDS for black individuals is in the Boston region at 1,271 per 100,000.
- Among regions, the highest age-adjusted prevalence rate of HIV/AIDS for Hispanic individuals is in the Western region at 1,462 per 100,000. This rate is 20 times the rate for white individuals in the Western region (72 per 100,000).
- Unlike the other health service regions where the age-adjusted prevalence rate of HIV/AIDS among white individuals is higher than among Asian/Pacific Islanders; in the Northeast region the age-adjust prevalence rate of HIV/AIDS is 100 per 100,000 for Asian/Pacific Islanders and 92 per 100,000 for white individuals.

Average Annual Rate of HIV Diagnosis by Race/Ethnicity, 2001-2003

Figure 4 Age-Adjusted Rate of HIV Diagnosis per 100,000¹ Population by Race/Ethnicity: Average Annual Rate 2001-2003, MA

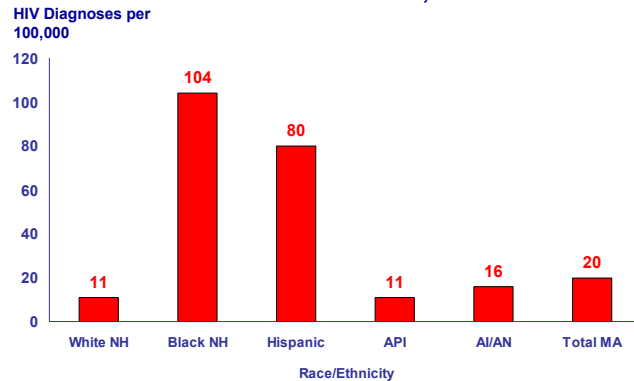


¹ Population sizes for rate calculations are based on year 2000 population estimates from the MDPH Center for Health Information, Statistics, Research and Evaluation; NH= Non-Hispanic, API = Asian/Pacific Islander; AI/AN = American Indian/Alaska Native; Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 7/1/04

- As of July 1, 2004, for every 100,000 people in Massachusetts, an average of 14 people were diagnosed with HIV infection each year from the years 2001 to 2003 (rate adjusted for age of the population groups).
- The age-adjusted average annual rate of HIV diagnosis from 2001 to 2003 among black individuals (90 per 100,000) is 13 times greater, and among Hispanic individuals (56 per 100,000) is 8 times greater than for white individuals (7 per 100,000).
- As with the consideration of differential impact for the HIV/AIDS prevalence rate, one must also note for the HIV diagnosis rates that, within the broad category of race/ethnicity, there are differences by place of birth. For example, 53% of black individuals diagnosed with HIV infection from 2001 to 2003 are non-US born as compared to 7% of white individuals. Non-US born black individuals diagnosed with HIV infection from 2001 to 2003 come primarily from Sub-Saharan Africa and the Caribbean Basin whereas non-US born white individuals come primarily from Central and South America.

Average Annual Rate of HIV Diagnosis by Race/Ethnicity for Males, 2001-2003

Figure 5 Age-Adjusted Rate of HIV Diagnosis per 100,000¹ Population Among Males by Race/Ethnicity: Average Annual Rate 2001-2003, MA

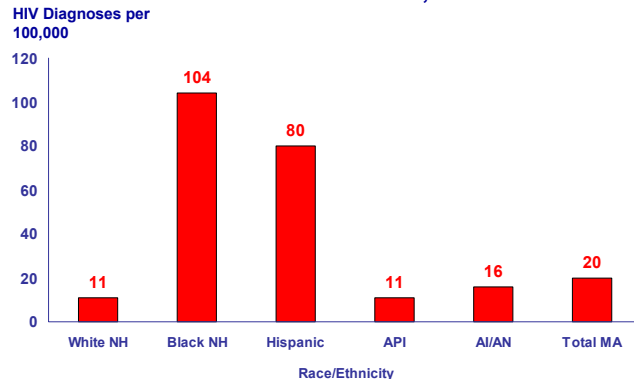


¹ Population sizes for rate calculations are based on year 2000 population estimates from the MDPH Center for Health Information, Statistics, Research and Evaluation; NH= Non-Hispanic, API = Asian/Pacific Islander; AI/AN = American Indian/Alaska Native; Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 7/1/04

- As of July 1, 2004, for every 100,000 **males** in Massachusetts, there was an average of 20 diagnosed with HIV infection each year from 2001 to 2003 (rate adjusted for age of the population groups).
- The age-adjusted average annual rate of HIV diagnosis from 2001 to 2003 among black **males** (104 per 100,000) is 9 times greater, and among Hispanic **males** (80 per 100,000) is 7 times greater than for white **males** (11 per 100,000).

Average Annual Rate of HIV Diagnosis by Race/Ethnicity for Females, 2001-2003

Figure 5 Age-Adjusted Rate of HIV Diagnosis per 100,000¹ Population Among Males by Race/Ethnicity: Average Annual Rate 2001-2003, MA



¹ Population sizes for rate calculations are based on year 2000 population estimates from the MDPH Center for Health Information, Statistics, Research and Evaluation; NH= Non-Hispanic, API = Asian/Pacific Islander; AI/AN = American Indian/Alaska Native; Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 7/1/04

- As of July 1, 2004, for every 100,000 **females** living in Massachusetts, there was an average of 8 diagnosed with HIV infection each year from 2001 to 2003 (rate adjusted for age of the population groups).
- The age-adjusted average annual rate of HIV diagnosis from 2001 to 2003 among black **females** (78 per 100,000) is 39 times greater, and among Hispanic **females** (34 per 100,000) is 17 times greater than for white **females** (2 per 100,000).

Average Annual Rate of HIV Diagnosis by Race/Ethnicity and Health Service Region, 2001-2003

- Among regions, the Boston HSR has the highest age-adjusted average annual rate of HIV diagnosis from 2001 to 2003 at 41 per 100,000.
- In each region, the age-adjusted average annual rate of HIV diagnosis among black and Hispanic individuals is higher than among white individuals.
- Among regions, the highest age-adjusted average annual rate of HIV diagnosis for black individuals is in the Northeast region at 123 per 100,000.
- The Northeast region also has the highest age-adjusted average annual rate of HIV diagnosis for Asian/Pacific Islanders at 14 per 100,000.
- Among regions, the highest age-adjusted average annual rate of HIV diagnosis for Hispanic individuals is in the Western region at 83 per 100,000.
- Among regions, the highest age-adjusted average annual rate of HIV diagnosis for white individuals is in the Boston region at 27 per 100,000.

Data Source:

HIV/AIDS Case Data: Massachusetts Department of Public Health, HIV/AIDS Surveillance System, All Data as of 7/1/04

For more detailed information and a description of data limitations please see "HIV/AIDS in Massachusetts: An Epidemiologic Profile."
For detailed data tables and technical notes see Appendix.